

Claims

[c1] 1. A method comprising the steps of:

- (a) receiving location data corresponding to a plurality of probe-feature locations on a substrate;
- (b) storing the location data;
- (c) accessing the location data; and
- (d) scanning the substrate based, at least in part, on the accessed location data.

[c2] 2. The method of claim 1, further comprising:

- (e) providing a first user interface that enables user specification of the probe feature locations.

[c3] 3. The method of claim 2, further comprising:

- (f) providing a second user interface that enables user selection of the location data; and
- (g) accessing the location data based, at least in part, on the user selection.

[c4] 4. The method of claim 2, wherein:
the first user interface enables user specification of the probe-feature locations by specifying one or more spacing distances between probe features.

[c5] 5. The method of claim 2, wherein:
the first user interface enables user specification of the one or more probe-feature locations by specifying one or more patterns of probe feature locations.

[c6] 6. The method of claim 2, wherein:
the first user interface enables user specification of the one or more probe-feature locations by specifying coordinates.

[c7] 7. The method of claim 6, wherein:
the coordinates include x and y coordinates.

[c8] 8. The method of claim 6, wherein:
the coordinates include user-specified coordinates of a reference point on
the substrate.

[c9] 9. The method of claim 6, wherein:
the coordinates include user-specified coordinates of one or more probe-
feature locations on the substrate.

[c10] 10. The method of claim 1, further comprising:
(e) storing the location data in an array content file in memory of a first
computer.

[c11] 11. The method of claim 10, wherein:
the first computer is constructed and adapted to control an arrayer.

[c12] 12. The method of claim 11, further comprising:
(f) transferring the location data from the first computer to a memory unit of
a second computer;
(g) providing a second user interface that enables user selection of the
location data; and
(h) accessing the location data from the memory of the second computer
based, at least in part, on the user selection.

[c13] 13. The method of claim 12, wherein:
the second computer is constructed and adapted to control a scanner.

[c14] 14. The method of claim 1, wherein:
the probe-feature locations include locations of probes of a spotted array.

[c15] 15. The method of claim 1, wherein:
the probe-feature locations include locations of probes of a synthesized
array.

[c16] 16. A method comprising the steps of:
(a) accessing location data corresponding to a plurality of probe-feature
locations on a substrate, wherein the location data is stored in memory of a

computer; and

(b) scanning the substrate based, at least in part, on the accessed location data.

[c17] 17. A computer program product comprising:

(a) an arrayer manager application constructed and arranged to

(i) receive location data corresponding to a plurality of probe-feature locations on a substrate, and

(ii) store the location data; and

(b) a scanner control application constructed and arranged to

(i) access the location data, and

(ii) scan the substrate based, at least in part, on the accessed location data.

[c18] 18. A computer program product, comprising:

(a) a user-interface manager that

(i) enables user specification of a plurality of probe-feature locations on a substrate, and

(ii) provides location data corresponding to the probe-feature locations;

(b) a data storage manager that stores the location data in a memory unit; and

(c) an output manager enabled to provide the location data to a scanner control application constructed and arranged to scan the substrate based, at least in part, on the accessed location data.

[c19] 19. The computer program product of claim 18, wherein:
the user interface manager enables user specification of the probe-feature locations by specifying one or more spacing distances between probe features.

[c20] 20. The computer program product of claim 18, wherein:
the user interface manager enables user specification of the one or more probe-feature locations by specifying one or more patterns of probe feature

locations.

- [c21] 21. The computer program product of claim 18, wherein:
the user interface manager enables user specification of the one or more probe-feature locations by specifying coordinates.
- [c22] 22. The computer program product of claim 21, wherein:
the coordinates include x and y coordinates.
- [c23] 23. The computer program product of claim 21, wherein:
the coordinates include user-specified coordinates of a reference point on the substrate.
- [c24] 24. The computer program product of claim 21, wherein:
the coordinates include user-specified coordinates of one or more probe-feature locations on the substrate.
- [c25] 25. The computer program product of claim 18, wherein:
the data storage manager stores the location data in an array content file in memory of a computer.
- [c26] 26. The computer program product of claim 25, wherein:
the computer is constructed and adapted to control an arrayer.
- [c27] 27. A computer program product, comprising:
 - (a) a data retriever that accesses location data corresponding to a plurality of probe-feature locations on a substrate; and
 - (b) a scan-area controller that controls scanning of the substrate based, at least in part, on the accessed location data.
- [c28] 28. The computer program product of claim 27, wherein:
the location data is stored in a memory unit of a first computer.
- [c29] 29. The computer program product of claim 28, wherein:
the first computer is constructed and adapted to control an arrayer.
- [c30] 30. The computer program product of claim 29, wherein:

the data retriever provides a user interface that enables user selection of the location data, and accesses the location data based, at least in part, on the user selection.

[c31] 31. The computer program product of claim 30, wherein:
the data retriever receives the location data from the first computer and
stores the location data in memory of a second computer.

[c32] 32. The computer program product of claim 31, wherein:
the second computer is constructed and adapted to control a scanner.

[c33] 33. The computer program product of claim 27, wherein:
the probe-feature locations include locations of probes of a spotted array.

[c34] 34. The computer program product of claim 27, wherein:
the probe-feature locations include locations of probes of a synthesized
array.

[c35] 35. A scanning system, comprising:
(a) a scanner; and
(b) a computer program product, comprising
(i) a data retriever that accesses location data corresponding to a
plurality of probe-feature locations on a substrate, and
(ii) a scan-area controller that controls scanning by the scanner of the
substrate based, at least in part, on the accessed location data.

[c36] 36. A scanning system, comprising:
(a) a computer;
(b) a scanner; and
(c) a computer program product that, when executed on the computer,
performs a method comprising the steps of
(i) accessing location data corresponding to a plurality of probe-
feature locations on a substrate, and
(ii) controlling scanning by the scanner of the substrate based, at least
in part, on the accessed location data.